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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,390	12/21/2001	Yue-Hong Chou	GEO1.PAU.01	1722

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Vic Y. Lin  
MYERS, DAWES & ANDRAS LLP  
Suite 1150  
19900 MacArthur Blvd.  
Irvine, CA 92612

EXAMINER
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NGUYEN, THU V

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/027,390

Applicant(s)

CHOU, YUE-HONG

Examiner

Thu Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) 48-50, 53-55 and 57-62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 5-11, 13-15, 17-20, 22-29, 31-33, 35, 37-40, 43-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Continuation of Disposition of Claims: Claims pending in the application are 1,2,5-11,13-15,17-20,22-29,31-33,35,37-40,43-46,48-50,53-55 and 57-62.

### **DETAILED ACTION**

The amendment filed on May 3, 2004 and January 13, 2004 have been considered. By the amendments, claims 3-4, 12, 16, 21, 30, 34, 36, 41-42, 47, 51-52 have been canceled, claims 48-50, 53-63 have been withdrawn from consideration, claims 1-2, 5-11, 13-15, 17-20, 22-29, 31-33, 35, 37-40, 43-46 are now pending in the application.

#### ***Specification***

1. The disclosure is objected to because of the following informalities:

The status (patent Number) of the parent application 09/641,302 in page 1, line 11 should be provided.

#### ***Claim Objections***

2. Claims 31, 18 are objected to because of the following informalities:
  - a. In claim 31, line 2, the claimed "to a network" should be deleted, since the phrase has been deleted from the transmitting step in claim 18, line 9.
  - b. In claim 18, lines 10-11, the claimed "the network" should be corrected to "a network" to avoid lacks of antecedent basis in the claim.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 2, 5, 14, 19, 22, 32, 37-40, 43-46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- a. In claim 2, line 2; claim 19, line 2, the claimed utilizing data from "not more than three satellites" is not disclosed in the specification.
- b. In claim 5, line 2; claim 22, line 2; claim 37, line 2; claim 43, lines 1-2, the claimed utilizing only a "single" satellites is not disclosed in the specification.
- c. In claim 14, line 15; claim 32, line 16; claim 39, lines 12-13; claim 45, line 12, the claimed providing a location "including that obtained from another object" is not disclosed in the specification. The specification page 15, lines 10-11, page 16, lines 8-12, page 20, lines 14-20, and page 21, lines 15-22 disclose using dead reckoning data to determining the position of the corresponding (the host) object. However, the specification does not disclose using data from another object to determine the position of the host object.

- d. In claim 43, lines 9-10, the claimed “at least one satellite” does not correspond with the claim “single satellite” in lines 1-2 of claim 43.
- e. Claims 38-40, 44-46 are rejected as being dependent on the rejected base claims.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 6-7, 17-18, 23-24, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 2003/0067542).

As per claim 1, Monroe discloses an apparatus for communication network in which each object includes: a location circuit (para [0109], [0115]); a means for receiving location information, activating responsive function, storing events, and automatically activates selected functions controlling the first object in response to the location of the second object (para [0086]-0088]; [0091]; [0095]; [0115]); a communication circuit (para [0109]). Monroe does not explicitly teach using a processor as a means for receiving, communicating and activating responsive function. However, Monroe teaches that the first object is capable of performing the claimed function (para [0086]-0088]; [0091]; [0095]; [0115]). Further, implementing a

controller for controlling data processing, data analysis and data transmission would have been well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a well known controller for performing the analyzing position data, storing the data, and communicating data since selecting a known processor that is known to be able to perform the function of Monroe requires only routine skill in the art.

As per claim 6-7, Monroe teaches storing the location, time, of an object for an event, Monroe also teaches storing the type of event (para 0084; 0082). Further, storing speed, direction of an object would have been known. Further, choosing to store specific information that is of interest to an operator as prefer to a designer requires only routine skill in the art.

As per claim 17, implementing a plurality of input/output ports to interface with a plurality of systems would have been known.

As per claim 18, 23-24, 35, refer to claim 1-3, 6-7, 17 above.

7. Claims 2, 19-20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 2003/0067542) in view of Smith (US 6,239,721).

As per claim 2, 19-20, Smith teaches communicating with a well known terrestrial location detection network 31-1 to 31-6 (fig.1) to determine the position of the object from a combination of signals from the GPS system and the terrestrial location detection network (col.5,

lines 4-10; col.1, lines 10-15; col.4, lines 9-18). Smith does not explicitly disclose less than three satellites, however, since Smith disclose using the terrestrial data when the number of data received from the satellites is not sufficient (col.5, lines 4-8), and since it would have been well known that the number of data collected from four satellites are sufficient in determining the position of an object, Smith obviously disclose not more than three satellites as claimed. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a well known terrestrial communication network of Smith to the system of Monroe in order to improve correctness in determining object's position and to ensure obtaining object's position even if the object is traveling in a tunnel.

8. Claims 5, 22, 37, 43, are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 2003/0067542) in view of Pratt (US 6,285,315) and further in view of Smith (US 6,239,721).

As per claim 5, 22, 37, 43, Pratt teaches the capability of determining the location of the mobile device using either the data from the GPS receiver or the terrestrial data (col.6, lines 16-48) depending on the accuracy required. Further, determining location of a mobile object using terrestrial data only would have been known as taught by Smith in col.3, lines 31-34. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the terrestrial data when the data from the GPS receiver is not available, since using a known alternative method (using terrestrial data) for determining the location of a mobile device when the GPS signal is not available requires only routine skill in the art.



9. Claims 8-11, 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 2003/0067542) in view of Fera et al (US 6,338,152) and further in view of Ono (US 6,466,950).

As per claim 8-11, Monroe teaches storing events of history files and transmitting the events to other object (para 0086; 0123; 0109). Moreover, storing sent and received messages and tagging the files to be deleted would have been known as taught by Fera in col.4, lines 39-56; col.5, lines 1-10; col.7, lines 1-3; and clearing a data file after transmitting data file to a remote server would have been known as disclosed by Ono in col.7, lines 25-40. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include downloading and uploading data file of Monroe to a remote server and to delete the file after the transmission in order to facilitate saving data at a remote location when the memory device in the mobile object is limited.

As per claim 25-29, refer to claims 8-11 above.

10. Claims 13, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 2003/0067542) in view of Pratt (US 6,285,315) and further in view of Rowson et al (US 6,067,484).

As per claim 13, 31, Rowson teaches selecting a best signal from a plurality of input sources (col.6, lines 19-40), further, including modems for wireless communication between

devices would have been well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select the data from input sources of Pratt in order to ensure using appropriate signal for determining position of the mobile device of Monroe.

11. Claims 14, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 2003/0067542) in view of Burns et al (US 5,129,605).

As per claim 14, 32, Monroe teaches two-way radio communication utilizing transceiver (para 0109). Further, Burns teaches using the location data from the dead reckoning when the GPS fail to provide valid location fix (col.5, lines 14-17, lines 49-64; col.6, lines 9-20).

12. Claims 15, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 2003/0067542) in view of Burns et al (US 5,129,605) and further in view of Korver et al (US 6,373,403).

As per claim 15, 33, using three dimensional gyro 24 (fig.4) in the dead reckoning system would have been known as disclosed by Korver in fig.4. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the gyro of Korver in the dead reckoning system of Burns for the position communication system of Monroe in order to provide correct location concerning heading, pitch and roll of the vehicle.

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13. Claims 38, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 2003/0067542) in view of Pratt (US 6,285,315) and further in view of Smith (US 6,239,721) and Rowson et al (US 6,067,484).

As per claim 38, 44, refer to claim 13 above.

14. Claims 39, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 2003/0067542) in view of Pratt (US 6,285,315) and further in view of Smith (US 6,239,721) and Burns et al (US 5,129,605).

As per claim 39, 45, refer to claim 14 above.

15. Claims 40, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe (US 2003/0067542) in view of Pratt (US 6,285,315) and further in view of Smith (US 6,239,721) and Burns et al (US 5,129,605) and Krover et al (US 6,373,403).

As per claim 40, 46, refer to claim 15 above.

### ***Response to Arguments***

16. Applicant's arguments filed on January 13, 2003 have been fully considered but they are not persuasive.

In response to applicant's argument on page 25 through page 26, lines 1-5, independent claims does not explicitly claim the communication between the two objects themselves without a server or control center. Specifically, claim 1, line 1-2, claim "a network and including at least

a first and second object” this limitation implies a network having at least two objects, and might includes other components which can be a server, a central station, etc; moreover, claim 1, lines 11-12, teaches communicating data “within” the network. When the network includes a server or a control center, the communication obviously conducted within the network. Claim 1, therefore, does not distinguish the present application from Monroe’s teachings.

In response to applicant’s argument on page 26, second paragraph on claim 2, claim 2 does not claim computing with “only” one satellite as asserted by the applicant. Instead claim 2 claim “at least” one satellite, the claimed “at least” includes four satellites as well. In view of applicant’s amendment with added limitation “not more than three” satellites, a new ground of rejection is established to accommodate the added limitation.

In response to applicant’s argument on page 26, last paragraph through page 28, lines 1-11 to claims 6-11, claims 6-7 do not explicitly shows the functionality and utilization of the events as asserted by the applicant. The events disclosed in claim 6-7 is understood and interpreted by examiner as log of activities on an object. However, to accommodate applicant’s assertion, applicant should note paragraph 0082 in which Monroe also teaches automatically controlling other object in response to a detected event. With respect to claims 8-11, the downloading and uploading data file to a remote server and deleting data file after downloading the file to a remote server would have been well known. The well known features are herein provided by the teaching of Fera and Ono (refer to the 35 USC rejection aabove), the supported references just prove that the position established by examiner concerning well known features is

proper, the supported references do not mean changing the ground of rejection previously established by examiner.

In response to applicant's argument on page 28, last two paragraphs on claim 17, claim 17 does not claim how the input/output ports be utilized as asserted by applicant. Claim 17 just claim using the I/O port to couple the processor to a plurality of external devices, the external devices are understood and interpreted as the heat control system, the brake system, the multimedia devices such as CD player, radio tuner, etc. of the mobile object. As admitted by the applicant, there are a plurality of I/O ports at the central controller for interfacing and communicating with the external devices in a vehicle.

In response to applicant's argument on page 29, last three paragraphs through page 33, lines 1-6, claims 5, 22, 37, 43, and 52, do not explicitly exclude the fact that the location signal from the terrestrial should not be derived from the GPS source. Claims 5, 22, 37, 43 and 52 also do not explicitly teach that the functionality of terrestrial location network is not used for correcting inaccuracy of the GPS signal. Using terrestrial position data when the GPS data is not available would have been well known as previously asserted by examiner. This well known features is fully supported by Smith (US 6,239,721).

In response to applicant's argument on page 34, first paragraph, claim 13 does not disclose the two sources of location information (the GPS and terrestrial), nor does claim 13 disclose the two-way radio modems as asserted by applicant. In col.6, lines 26-27, Rowson teaches comparing signals received from different input terminals and discard inaccurate satellite

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signals, Rowson obviously teaches selecting and rejecting signals among at least two signals from different set of satellites.

In response to applicant's argument on page 36, second paragraph and third paragraph, Monroe teaches implementing two-way communication on the aircraft utilizing transceivers for transmitting/receiving messages within the network, and the capability of causing the other object to change its behavior (para 0109; 0082).

Claims 48 and 57 are non-elected claims and have been withdrawn from consideration.

Applicant's amendment with respect to claim 2, 37, 43 (single satellite), etc. necessitated the new ground(s) of rejection presented in this Office action; other references used in supporting the well known features (claims 8-11, etc). Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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**Any response to this final action should be mailed to:**

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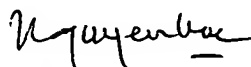
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Hand-delivered responses should be brought to Crystal Park V, 2451 Crystal  
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Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to Thu Nguyen whose telephone number is (703) 306-9130. The  
examiner can normally be reached on Monday-Thursday from 8:00 am to 6:00 pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
supervisor, Thomas Black, can be reached on (703) 305-8233. The fax phone number for this  
Group is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the Group receptionist whose telephone number is (703) 308-1113.



**THU V. NGUYEN  
PRIMARY EXAMINER**

July 30, 2004